

wherein the numerically controlled oscillator is adapted to receive the numerically controlled oscillator setting from the computer to cause the upconverter to transmit a signal of a desired frequency to an antenna.

Claim <sup>18</sup>~~17~~ (New). The apparatus of claim 16, further comprising:

an antenna, the antenna being electrically coupled to the downconverter.

Claim <sup>19</sup>~~18~~ (New). The apparatus of claim 16, wherein the numerically controlled oscillator is configured to receive a frequency setting from the computer to compensate for inaccuracies of the oscillator.

Claim <sup>20</sup>~~19~~ (New). The apparatus of claim 16, wherein the digital modulator is configured to output a digital intermediate frequency to the digital to analog converter, and the digital to analog converter is configured to convert the digital intermediate frequency to an analog signal.

Claim <sup>21</sup>~~20~~ (New). The apparatus of claim 16, wherein the upconverter is configured to receive an analog signal from the digital to analog converter, the upconverter being configured to upconvert the analog signal to a desired transmission frequency.

Claim <sup>22</sup>~~21~~ (New). The apparatus of claim 16, wherein the radio frequencies are GPS radio frequencies.